

BLANK PAGE





Indian Standard

(Reaffirmed 2002)

SPECIFICATION FOR CEREBRAL PALSY CHAIR, TUBULAR, INSTITUTIONAL MODEL

- 1. Scope Dimensional and other requirements for institutional model cerebral palsy chair.
- 2. Shape and Dimensions As shown in Fig. 1.
- 3. Material
- 3.1 Framework Electric resistance butt-welded steel tubes (ERW) conforming to IS: 2039-1964 'Specification for steel tubes for bicycle and allied purposes'.
- 3.2 Best materials suited for the purpose shall be used for other components.

4. Requirements

- 4.1 The seat and the back of the chair shall be provided with a cane insert or shall be upholstered. Solid seat with foam-rubber cushion shall be supplied, if specifically asked by the purchaser.
- 4.2 The back shall be capable of being tilted from 80° to 120° to the seat. The tilting shall be achieved by a worm and worm gear. The tilting shall be only for the back, the seat not getting tilted when the back is tilted. The tilting mechanism shall function smoothly without jerks.
- 4.3 The legrest shall be upholstered. It shall be capable of being fixed at different angles between 30° and 90° to the vertical. The clamping shall be positive and shall not loosen accidentally or under load.
- 4.4 The distance of footrest from the seat shall be adjustable to suit the leg length of the user. The locking arrangement for adjustments shall be positive and the distance shall not change unless intended.
- 4.5 The various adjusting mechanisms in the chair shall be sturdy and easy to operate and shall allow the adjustments to be carried out smoothly without undue effort.
- 4.6 The chair shall have a provision for fixing a partition to the seat to keep the knees of the patient apart.
- 4.7 The legs shall be provided with rubber tips conforming to IS: 5150-1969 'Specification for, rubber tips for crutches and walking sticks'.
- 4.8 When placed on a level surface, the chair shall not rock and shall be completely stable.
- 4.9 The chair shall have a removable tray fitted on its armrests. There shall be a suitable arrangement to tilt the tray.
- 4.10 All edges likely to be touched by the patient shall be rounded and nowhere sharp. All surfaces coming into contact with the body of the patient shall be smooth and free from any sharp imperfections likely to injure the patient. All corners shall be rounded.
- 4.11 The tubular structure of the chair shall be spray painted with air-drying or stoving enamel. The colour of the paint and the number of coats shall be as agreed to between the purchaser and the supplier. Prior to painting, all surfaces shall be degreased, rust-proofed and then suitably protected by an anticorrosive primer. Each coat shall be separately stoved or air-dried as the case may be. The finished paint shall be hard and shall not readily chip or flake.
- 4.12 All mild steel components shall be either plated or painted. If painted, the painting shall be done as in 4.11. If plated, the plating shall conform to Service Grade No. 2 of IS: 1068-1968 'Specification for electroplated coatings of nickel and chromium on Iron and steel (first revision)'.
- 4.13 The brass components shall be plated chromium over nickel. The plating shall conform to Service Grade No. 2 of IS: 4827-1968 'Specification for electroplated coatings of nickel and chromium on copper and copper alloys'.
- 4.14 The springs for the locking arrangements shall be hardened and tempered to 650 to 750 HV.
- 5. Load Test Put a load of 800 N on the seat of the chair. Attain this load gradually and allow to act for 5 minutes. The chair shall not suffer any damage and all the mechanisms shall continue to function satisfactorily after removing the load.

Adopted 8 August 1973

@ September 1983, ISI

Gr 1

- 6. Marking The chair shall have a name plate or label fixed to it showing the manufacturer's name, initials or recognized trade-mark.
- 6.1 /S/ Certification Marking Details available with the Indian Standards Institution.
- 7. Packing As agreed to between the purchaser and the supplier.

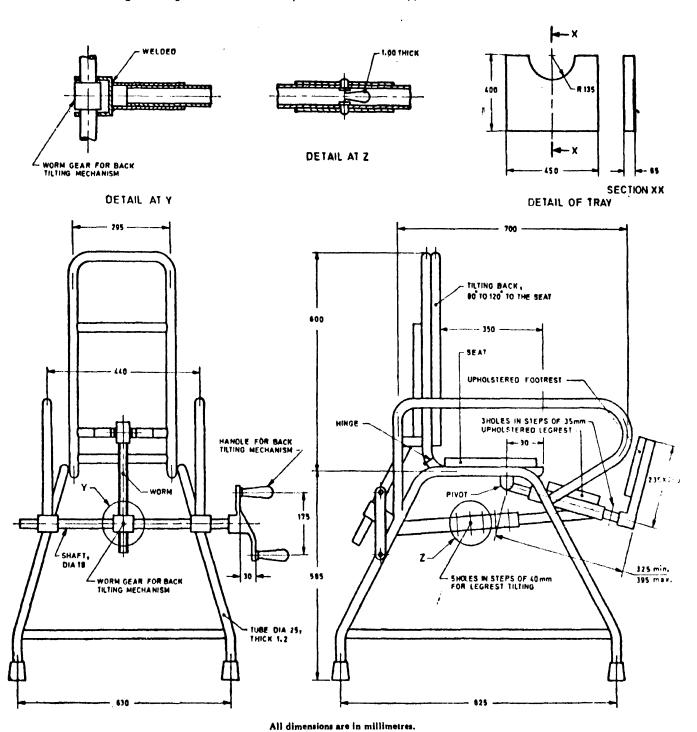


FIG. 1 CEREBRAL PALSY CHAIR, TUBULAR, INSTITUTIONAL MODEL, TYPICAL